



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,105	10/06/2003	Kenji Kawaguchi	02-293137	1075

21254 7590 11/14/2007
MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC
8321 OLD COURTHOUSE ROAD
SUITE 200
VIENNA, VA 22182-3817

EXAMINER

FAROUL, FARAH

ART UNIT	PAPER NUMBER
----------	--------------

2616

MAIL DATE	DELIVERY MODE
-----------	---------------

11/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/678,105	Applicant(s) KAWAGUCHI ET AL.	
	Examiner Farah Faroul	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47, 49, 51-55, 57 and 59-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47, 49, 51-55, 57 and 59-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>07/31/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following Office Action is based on the amendment filed on August 28, 2007, having claims 1-47, 49, 51-55, 57 and 59-64 and figures 1-9 (claims 48, 50, 56 and 58 having been cancelled).

Claim Objections

2. Claim 45 is objected to because of the following informalities:

The word "conection" in line 9 of claim 45 seems to be a misspelling of the word "connection". It is suggested that applicant corrects the spelling error.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 45-47, 49, 51 and 51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 45 recites the limitation "said first signal connection" in line 12. There is insufficient antecedent basis for this limitation in the claim. Applicant has recited "first signaling connection" not "signal connection". Correction is required.

Claim 46 recites the limitation "said mobile terminals" in line 3. There is insufficient antecedent basis for this limitation in the claim. Applicant has recited "a mobile terminal" in the previous claim.

Claim 46 recites the limitation "said second signal connection" in line 3. There is insufficient antecedent basis for this limitation in the claim. Applicant has recited "second signaling connection" not "signal connection". Correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 21-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The limitations "a computer-readable program" in claim 21 and "the program" in claims 22-26 are directed towards non-statutory subject matter. The limitations should be changed to "a computer-readable medium encoded with computer-executable instructions".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2616

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-47, 49, 51-55, 57, 59-64 are rejected under 35 U.S.C. 102(e) as being anticipated by Xu et al. (US 2006/0166653 A1).

For claims 1, 9, 15, 21, and 54, Xu discloses a mobile communication system including a core network having a node with a packet switching function for packet data communication, a radio network controller, and a mobile terminal, wherein a connection is set on an interface between the radio network controller and the core network (Figure 1 depicts a core network (20) having an SGSN (123) node connected to a radio network controller (112) and a mobile station),

The mobile communication system comprising: connection setting means for setting the connection for multicast data communication separately from the connection for the packet data communication (Figure 1, elements 123 and 150 shows separate connections for packet switching and multicast service and paragraph 37, line 1 to paragraph 38, line 11)

The radio network controller initiates the connection for the packet data communication and the core network includes the connection for the broadcast or multicast service (paragraphs 42 and 46)

For claims 27, 33, 39, Xu discloses a core network for packet switching (Figure 1, element 120)

A radio network controller (Fig 1, element 112), which initiates a request for signaling connection to the core network to set on an interface with the core network (paragraph 46)

If a request is related to multimedia broadcast multicast service, the core network initiates a request for signaling connection to the radio network controller, instead of the request being initiated from the radio network controller (paragraph 40)

For claims 45, 53 and 61-64, Xu discloses a mobile terminal (see mobile terminal (MS) in Figure 1)

A core network for packet switching and a radio network controller to control a radio network, wherein a first signaling connection for the mobile terminal and a second signaling connection for a broadcast or multicast service are set on an interface between the core network and the radio network controller (Figure 1, elements 123 and 150 shows separate connections for packet switching and multicast service and paragraph 37, line 1 to paragraph 38, line 11)

The radio network controller initiates the first signaling connection for the mobile station and the core network initiates the second signaling for the broadcast/multicast service and the second signaling connection is separate from the first signaling connection (paragraph 46)

For claim 46, Xu discloses a plurality of mobile terminals including the mobile terminal and the second signaling connection is shared among the plurality of mobile terminals (see plurality of mobile terminals (MS) in Figure 1)

For claims 2, 10, 16, 22, 28, 34, and 40, Xu discloses the connection setting means for setting the connection for the multicast data communication in common to a plurality of mobile terminals that attempt to receive the multicast data communication service (paragraph 34, lines 1-16, paragraph 40, lines 1-10 wherein the connection is set up for plural mobile stations to receive the multicast service)

For claims 3, 11, 17, 23, 29, 35, 41, 51, and 59, Xu discloses the connection means for setting the connection for the multicast data communication in response to a service receiving request from a first mobile terminal attempting to receive the multicast data communication service (paragraph 40, line 1 to paragraph 42, line 13 wherein connection for multicast service is set up after the mobile station sends a "joining" request or service receiving request)

For claims 4, 12, 18, 24, 30, 36, 42, 52 and 60, Xu discloses a first connection releasing means for releasing the connection for the multicast data communication in response to a service leaving request from a last mobile terminal receiving the multicast data communication service (paragraph 61, line 1 to paragraph 64, line 6 wherein multicast connection is released after a "cell leave" message is sent by the mobile station)

For claims 5, 13, 19, 25, 31, 37 and 43, Xu discloses the connection setting means for setting the connection for multicast for the multicast data communication individually to each of the plurality of the mobile terminals that attempt to receive the multicast data communication service (paragraph 43, line 1 to paragraph 44, line 5 wherein the multicast connection is set up for each mobile station individually)

For claims 6, 14, 20, 26, 32, 38 and 44, Xu discloses a second connection for, in response to the multicast data communication service leaving request from each of the plurality of mobile terminals, releasing the connection for the multicast data communication corresponding to the mobile terminal (paragraph 61, line 1 to paragraph 64, line 6 wherein multicast connection is released after a "cell leave" message is sent by a mobile station from a plurality of mobile stations)

For claim 7, Xu discloses the connection for multicast data communication in the mobile terminal is managed in a PS domain including an area for the packet switching function in the core network (paragraph 34, line 1 to paragraph 36, line 6 and Fig 1, element 150 wherein the broadcast-multicast service center is in the PS domain area)

For claim 8, Xu discloses the connection for the multicast data communication in the mobile terminal is managed in a domain dedicated to the multicast data communication which is different from the PS domain including the area for the packet switching function in the core network (paragraph 34, line 1 to paragraph 36, line 6 and (paragraph 34, line 1 to paragraph 36, line 6 and Fig 1, element 150 wherein the broadcast-multicast service center is separate from the PS domain)

For claim 47 and 55, Xu discloses the second communications service comprises a multimedia broadcast multicast service (MBMS) (figure 1, element 150, wherein the broadcast-multicast service center provides MBMS Service, paragraph 38, lines 1-13)

For claims 49 and 57, Xu discloses the first signaling connection comprises a PS lu connection (paragraph 34, line 1 to paragraph 36, line 6, Figure 1, elements 112 and 123, see connection between SGSN and radio network controller)

Response to Arguments

6. Applicant's arguments filed on August 28, 2007 have been fully considered but they are not persuasive. The objections to the drawings are withdrawn. The 101 rejections are maintained as the limitation "computer program" is directed towards non-statutory subject matter. Applicant is advised to amend the limitations as suggested in the Office Action. Applicant has argued that the prior art of record does not show separate connection between the packet data service and the multicast service. The claim as written calls for "separate connection between the packet data communication and the multicast communication". Xu clearly depicts such connection in Figure 1 (see connections between elements 123, 124, 140 and 150). Applicant has not specified in the claim how such connection is made.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

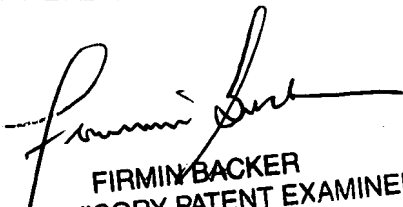
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farah Faroul whose telephone number is 571-270-1421. The examiner can normally be reached on Monday - Friday 6:30 AM - 4 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

F.F.


FIRMIN BACKER
SUPERVISORY PATENT EXAMINER